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EXAMINER
VU, TUAN A

ART UNIT	PAPER NUMBER
2193	

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/822,300	MUENZEL, GEORG	
	Examiner	Art Unit	
	Tuan A. Vu	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the Applicant's submission filed 7/24/2006.

Claims 1, 16, 18-24, 34-35, 39-41, 44-45, 47, and 50-51 have been amended; and claims 1-52 have been re-submitted for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 36-38 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter.

> The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a " useful, concrete, and tangible result" be accomplished. An "abstract idea" when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a "useful, concrete and tangible result".

As per claim 36, the claim only recites a storage medium having stored thereon an executable markup language version of an automation control program, such computer program adapted for controlling a programmable logic controller, and created using a graphical program language. The claim does not recite any data transformation or action step resulting from putting the stored executable version into practical use (like execution via a computer to implement an application or a method) so to reasonably convey that such executing action would yield some substantially useful, concrete, tangible result. As recited, the claimed program code to control some device is described as being represented in some stored form, such storing followed by no teaching on a tangible hardware support that effects an action that would transform, manipulate

such stored content --or program data therein-- in a sufficient manner deemed substantial, specific and credible by one skill in the art. Even though the above claimed program code is recited as being adapted for control some controller, the fact that it is only adapted for such control cannot translate into a actual action (or execution via an engine) being taken so to yield any form of result; that is, the phrase 'adapted for' merely entails that some functionality exists but remains static without being put into use. Merely descriptive elements are statutorily non-practical per se, thus basically amounting to abstract entities. The claimed system must reasonably convey specificity about a practical application based on action interrelating the elements therein (how these elements participate via interaction to yield a real-world result) so that such specific action would reasonably lead to a useful, concrete and tangible result, and should not just be limited to listing abstract concepts purported for what appears to be but an abstract representation standing for an intended use (emphasis added on 'for controlling' as a intended use). As recited, the claim also falls into what appears to be a generalization of teaching, bordering what is statutorily referred to as an omnibus limitation, namely the reciting of 'adapted for controlling a … controller', semantically preempting thereby many industry-related methodologies. The basic requirement for a USC 101 statutory invention requires that it show a substantial, specific and credible disclosure; none of which is perceived from the above 'adapted for' limitation. Hence, the claim only amounts to an abstract, non-practical idea for failing the requirement of the Practical Application test, hence is rejected for leading to a non-statutory subject matter.

Claims 37-38 are also rejected for failing to remedy to the deficiencies of the base claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dole, USPN: 6,634,008, in view of Hoskins et al., USPN: 6,167,406 (hereinafter Hoskins).

As per claim 1, Dole discloses a method for representing industrial automation computer program code created using a graphical programming language (e.g. col. 8, lines 22-32), the method comprising:

identifying an internal representation of an industrial automation computer program (e.g. *files and libraries, file defining methodologies... executable methodologies* - col. 7, lines 14-49; *Verilog file* – col. 8, lines 25-32; col. 8, line 63 to col. 9, line 19; col. 10, lines 32-56; col. 13, line 43 to col. 14, line 15; *netlist* – col. 14, lines 42-47; step *503* – Fig. 8; Fig. 11-12; *job steps, chain job* – col. 16, lines 5-9; col. 16, lines 53-55 – Note: all files generated from the EDA tool reads on internal representation of the automation program), the internal representation created via a graphical programming language (e.g. col. 8, lines 22-32; col. 5, lines 11-21; step 503 – Fig. 8) ; and

converting the internal representation to a markup language version of the code industrial automation computer program (e.g. HTML, CGI - col. 7, lines 26-42; Fig 10; *more desirable to use XML* -col. 16, lines 10-47; Fig. 13).

Dole does not explicitly disclose that the industrial automation program is to control a programmable logic controller (PLC). At the time the invention was made, embedding complex

system in a single chip – IC - such as endeavored by Dole (see Dole: *system-on-chip* - BACKGROUND) such that complex controlling micro chip functions are being embodied in integrated circuits or single chip was a known concept. In the same line of industrial work and/or circuits building/controlling as Dole (see Dole: Fig. 28) -- that is, in view of the web based methodologies by Dole to assemble block and execution of the control flow of components in a circuit design-- using a object-oriented modeling tool analogous to Dole, Hoskins not only purports design of chip assemblies (see col. 16, lines 1-10) like in the line of manufacturing such as Dole; but also demonstrates the use browser technologies and markup language, e.g. SGML and activeX, to transport application program development and related representation across platforms and to facilitate developers builder environment (e.g. col. 11, lines 50-63; col. 12, lines 47-65) and further discloses a framework to implement automation control using editing interface to implement a *ladder logic* in relation to a Programmable Logic Controller (PLC) to effect the controlling tasks (col. 12, line 66 to col. 13, line 51; Fig. 2-80). In view of the known concept that complex logic controller be embodied in one microcontroller IC type design; along with the analogous approach by Dole to use of HTML based connectivity to communicate methodologies control and design data among stations and by Hoskins' HTML-based framework to similarly facilitate developers to implement a design of a controller (as by Hoskins), such target implementation being a PLC, it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply the circuit synthesis tool, control data communication and web markup conversion as taught by Dole so that the target to be designed would be a control logic of a integrated chip having control functionality of a PLC such as taught by Hoskins. One would be motivated to do so because the internet based control applied to

industrial design and control as endeavor by both Dole and Hoskins can enable simultaneous control from multiple developers as set forth above, and using this framework as by Hoskins would enable industrial logic as perceived by Dole to target for design of PLC as one of circuitries as endeavored by Dole based on the facilitated communication as set by Hoskins.

As per claims 2-3, Dole discloses storage of the markup language version of the industrial automation computer program to be stored in computer storage device (e.g. *XML files* – col. 16, line 21-67) for transmission and being displayed for editing discloses inherent storage for transport across the internet (e.g. Fig. 5).

As per claims 4 and 5, Dole discloses converting the markup-formatted code of the industrial automation computer program to the internal representation in computer memory as a corresponding graphical programming language version the industrial automation computer program (e.g. step *527* – Fig. 13; Fig. 17-23 – Note: executing markup file via file decompression to restore *DAG or chip/block or Netlist* based synthesis files defining a circuitry job chain reads on corresponding graphical programming language).

As per claims 6-7, Dole discloses Fig. 5 and XML (e.g. col. 16, line 10-67).

As per claims 8 and 10-11, Dole discloses *step-by-step flows* and *schematic* for a circuit design being documented (e.g. col. 5, lines 11-16; col. 12, lines 5-48); hence has disclosed a graphical language comprising flowchart language and sequential flow chart (*DAG* - col. 16, lines 52-55; col. 17, lines 22-27; Fig. 23) and block diagram language (e.g. step 405-407 – Fig. 9; col. 12, lines 42-55; Fig. 8, Fig. 19, 28 – Note: *model* and *physical layout* of IC in a circuit as well as UI manipulating of block flow – see col. 5, lines 11-32 - reads on block diagram graphical type of language).

As per claim 9, Dole does not teach graphical programming language comprising a ladder logic, but as evidenced via the teachings by Hoskins, providing a ladder logic to be implemented for transmission of circuit design and flow control would also have been obvious in view of the methodologies by Dole to assemble block and execution of the control flow of components in a circuit design. But the ladder logic implementation -- so integral to programmable controller-- in the web-based approach by Hoskins for PLC application with control by multi-users has been mentioned in claim 1, making this limitation obvious in view of the rationale as set forth therein.

As per claims 12 and 14-15, Dole discloses modeling (e.g. *synthesis tool, behavioral model, schematic* - col. 12, lines 5-48; col. 15, lines 20-47; *Flow/steps 1119* -Fig. 10; Fig. 23); hence has disclosed graphical language comprising a flowchart, block diagram, and function diagram (re claims 8, 10-11) being converted into markup language and decompressed therefrom (re claims 4-5).

As per claim 13, this claim incorporates the rejection of claim 7; and would also includes the rationale to the 'ladder logic' limitation obvious in view of the rejection of claim 9.

As per claim 16, Dole discloses an tool with editor command (e.g. col. 13, lines 22-44; Fig. 4, 10, 12).

As per claim 17, Dole discloses executing circuit of design block from the XML language in corresponding graphical language version of the industrial automation computer program (e.g. step *527* – Fig. 13; Fig. 17-23 – Note: executing markup file via file decompression to restore *DAG or chip/block or Netlist* based synthesis files defining a circuitry job chain reads on corresponding graphical programming language).

As per claim 18, see Dole's browser use (Fig. 5).

As per claim 19, this is a computer product with computer-readable medium (see Dole: col. 28, lines 6-8) for performing the same steps limitations recited respectively in claim 1; hence is rejected with the corresponding rejections as set forth in claim 1, including the rationale to address the PLC controlling function of industrial automation computer program limitation.

As per claims 20-23, refer to the rejections of claims 2, 4, 3, 5, respectively.

As per claims 25-26, and 28, refer to claims 7-8, and 10, respectively.

As per claims 27 and 31, these claims correspond to claims 9 and 13 respectively, hence are rejected using the same rationale as set forth therein, respectively.

As per claims 24, 29 and 33, refer to claims 6(for browser) and 11(for sequential chart), respectively.

As per claims 30 and 32, refer to claims 12, 15, respectively.

As per claims 34-35, refer to claims 17 and 16, respectively.

As per claim 36, Dole discloses computer-readable storage medium having stored thereon a representation of industrial automation program code as markup language version of the industrial automation computer program (e.g. col. 16, lines 10-47; Fig. 13), but Dole fails to teach that the program code is to control a programmable logic controller. However, the limitation as to this automation program adapted for an application such to control in a programmable logic controller (PLC) has been treated as obvious in view of the rationale as set forth in claim 1.

As per claim 37, see claim 7.

As per claim 38, Dole implicitly discloses coupling to remote computer system (e.g. Fig. 5).

As per claim 39, Dole discloses a computer program product for permitting a user to create industrial automation computer programs (e.g. col. 8, lines 22-32), the product comprising a computer-readable storage medium having a computer program code on it, the code comprising:

industrial automation graphical programming language code, an editor adapted to permit the user to create industrial automation computer program using graphical elements (e.g. *synthesis tool, behavioral model, schematic* - col. 12, lines 5-48; *DAG* - col. 16, lines 52-55; col. 17, lines 22-27; Fig. 23; step 405-407 – Fig. 9; col. 12, lines 42-55),

the industrial automation graphical program being stored in an internal representation during execution (*files and libraries* - col. 7, lines 14-49; *Verilog file* – col. 8, lines 25-32; col. 8, line 63 to col. 9, line 19; col. 10, lines 32-56; col. 13, line 43 to col. 14, line 15; *netlist* – col. 14, lines 42-47; step *503* – Fig. 8; Fig. 11-12; *job steps, chain job* – col. 16, lines 5-9; col. 16, lines 53-55); and

program code for converting the industrial automation computer program thus stored in the internal representation to a markup language version of the industrial automation computer program (e.g. HTML, CGI - col. 7, lines 26-42; Fig 10; *more desirable to use XML* -col. 16, lines 10-47; Fig. 13).

Dole does not explicitly disclose that the industrial automation program is to control a programmable logic controller (PLC). But this limitation has been addressed in claim 1.

As per claim 40, Dole discloses converting industrial automation computer program from the markup language format to the internal representation (see rejection of claim 4).

As per claim 41, Dole discloses a method for communicating the logical structure of software industrial automation control data in order to permit a plurality of application developers to create applications relating to the data, the method comprising:

creating a schema defining a content model for markup language version of an industrial automation computer program system (e.g. col. 7, lines 26-42; DTD – col. 16, lines 10-20; Fig. 13; col. 16, line 65 to col. 17, line 2) converted from a graphical language version of the industrial automation computer program (*synthesis tool, behavioral model, schematic* - col. 12, lines 5-48; *DAG* - col. 16, lines 52-55; col. 17, lines 22-27; Fig. 23; step 405-407 – Fig. 9; col. 12, lines 42-55); and

posting the schema for access over the network by the application developers (e.g. Fig. 5; Fig. 13; DTD – col. 16, lines 10-20).

Dole does not explicitly disclose that the industrial automation control program is to control a programmable logic controller (PLC). But this limitation has been addressed in claim 1.

As per claims 42 and 43, refer to claim 7-8, respectively.

As per claim 44, Dole discloses a method for providing software industrial automation computer program from a system of developers coupled in a network (Fig. 5, 13), the system comprising:

accessing a markup language version of the industrial automation computer program (e.g. Fig. 10; col. 16, line 21-67), the markup language version of the computer program

converted from a representation created using a graphical programming language (e.g. HTML, CGI - col. 7, lines 26-42; Fig 10; *more desirable to use XML* -col. 16, lines 10-47; Fig. 13 – Note: using browser technologies to create CGI-script or XML DTD file reads on using graphical programming language);

transmitting the markup language version of the industrial automation computer program over the network in connection of a client system address, thereby causing the markup-version of the industrial automation computer program to be received by the receiving system (e.g. Fig. 5, Fig. 13, 17-23).

Dole does not explicitly disclose that the industrial automation program is to control a programmable logic controller (PLC). But this limitation has been addressed in claim 1.

As per claim 45, Dole discloses client transmitting to the server data relating to the markup language version of the automation computer program, wherein the server has access to the modified industrial automation computer program in response thereto, the modified industrial automation computer program is provided in markup language version (e.g. Fig. 5-6; col. 15, line 58 to col. 16, line 4), and further comprising: transmitting the markup version modified industrial automation computer program to the client system address to be received by the client (Fig. 5; Fig. 10 – Note: Fig. 10, steps 1115, 1117 versions to select and posted to developers reads on modified industrial automation computer program or methodologies version transmitted in markup language).

As per claim 46, Dole discloses modeling to support a business application programming scheme using a modeling tool (re claim 44) but fails to disclose using mail message for communications. Official notice is taken that in an enterprise wherein multiple

users are connected via the enterprise network services such that network communication and data distribution help fulfill the enterprise business applications, the use electronic mail to communicate data or update information was a well-known concept at the time the invention was made. The providing of electronic mail to Dole's system so as to enable multiple developers to communicate with the common framework to retrieve markup-formatted control data would have been obvious in light of the benefits related to such type of communications as suggested by the well-known concept from above.

As per claims 47 and 48, see Dole (e.g. col. 16, line 21-67; Fig. 5, 13).

As per claim 49, this claim includes a variation of claim 44, such variation considered evident in that a client can be a first or a second client in Dole's HTML communication protocol and service rendered to requesting developers, and is rejected using the rationale set forth in claim 44 to address the transmitting of control data based on the network address of the first client system, because in view of the server/client paradigm (Dole: Fig. 3-5), the markup language version in received by a first client and possibly a second client.

As per claim 50, this claim includes the same limitation of claim 4 or 40; and is rejected with the rationale used in claim 4 or 40 in conjunction with the rejection as set forth in claim 49; because in a network where markup data is distributed, rendering such data back into internal representation by a first, a second or a third client would be the same.

As per claim 51, Dole discloses a method for industrial automation control applications, comprising:

providing a computer system coupled to a network (e.g. Fig. 5);

configuring a first computer to receive over the network transmissions of data from a plurality of industrial automation developer systems (Fig. 3-5); and

receiving data from a the plurality of industrial automation computer program developer systems, the data comprising an industrial automation computer program in a markup language version (e.g. col. 16, line 21-67; step *527* – Fig. 13; Fig. 17-23), the markup language version of the computer program converted from a representation created using a graphical programming language (e.g. col. 7, lines 26-42; DTD – col. 16, lines 10-20 – Note: using browser technologies to create CGI-script or XML DTD file reads on using graphical programming language).

Dole does not explicitly disclose that the industrial automation program is to control a programmable logic controller (PLC). But this limitation has been addressed in claim 1.

As per claim 52, see claim 7.

Response to Arguments

6. Applicant's arguments filed 7/24/2006 have been fully considered but they are not persuasive. Following are the corresponding Examiner's rebut in regard thereto.

Rejection 35 USC §101:

(A) Applicant has submitted that the use of 'medium' followed by structural and functional interrelationship would permit the functionality to be realized, hence the claim would be statutorily proper. In reply, the rejection of USC 101 has set forth clearly as to why the word 'adapted for' such as recited does not contribute in establishing specific functionality being performed or carried out via concrete actions so to reasonably convey that some tangible real world entities would have resulted therefrom. The recitation of 'adapted for controlling' does not particularly shed specifics to how this 'controlling' amounts to in order to inform one skill in

the art to be learned on any form of step action or transformation so to yield a tangible result; and as set forth above, such amendment does remedy a non-statutory type of deficiency; i.e. there is lack of actual and concrete step actions (or reasonable specific teaching regarding thereto) using what appear to be the functionality of 'controlling', and this does not teach that at the end of such steps some object (in the domain of the application) being controlled reaches a concrete and useful state relative to a previous state existing prior to such controlling step is taken; such object state being deemed tangible and useful in the field of application as intended, as required per the Practical Application Test.

The arguments mentioning about the Programmable Logic controller – which is the intended domain of application - would be not commensurate or relevant with the points raised by the ground of rejection.

Rejection 35 USC §103:

(B) Applicant has submitted that Hoskins discrediting of the markup language and praise non-markup language (Appl. Rmrks, pg. 16, bottom); and in return, it is noted that there is no direct referral to any part of the Office Action being put under scrutiny in order for a proper rebut be put into effect; and this remark appears to be not commensurate with the specifics of the rejection; and thus will not be given weight for it does not establish content pertinent to what is deemed a proper prima facie response in regard to the state of the Office Action. Applicant contends with asking where are the teachings to would require to meet the rationale of rejection when it is laid out in black & white in the rejection which limitation has been met and which would be rendered obvious.

(C) Applicant alleges that Dole's invention is not relevant art in light of the instant invention; and requires withdrawal of the rejection of claims 1-52 should be based thereupon (Appl. Rmrks, pg. 20-21). This global remark without reference to absolutely no claim does not clearly point out specifics in the Office Action with respect to specific claim(s); hence cannot be addressed for it only bears a remark of general nature not traversing the very grounds of rejection in the Office Action which are deemed specific, detailed and intended for each and all of the corresponding claims. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims (e.g. which limitation, in which claim) patentably distinguishes them from the references.

(D) Applicant has submitted concerning the claimed 'converting the internal representation to a markup language version of the industrial automation computer program', Dole's cited part only show a graph, about which Applicant inquires **where** Dole provides 'converting', 'markup language version', 'internal representation of … controller', and all of the above; and that when combined with Hoskins, the rejection's applied portions do not express each and every limitation of **claim 1** (Appl Rmrks pg. 22 to pg. 26, top). The rejection has set forth mappings from Dole to each of the portion of the above recited subject matter; and it is deemed superfluous (emphasis added) here to again paste the entire text of rejection in terms of mapping Dole's applied parts to each of the above limitations and where Dole teachings require combination with Hoskins. The examiner has --with best effort-- interpreted each of the claimed features (e.g. if there is unclear teaching from the claim, a claim indefiniteness type of rejection would be set forth) and correspondingly established parts of Dole that can reasonably be analogized to each feature

(refer to rejection); and Applicant's rebut thereto is equally expected to be presented in a parallel manner. That is, for each of the Examiner's mappings (i.e. Dole's cited parts), Applicant has to pinpoint specific portions and any corresponding deficiency thereof. Until Applicant detects specific in each of the cited parts with respect to specific language used in claim 1, the above questions by Applicant can only be viewed as a attempt to discredit the rejection, but which amounts to an allegation put in form of questions that can be deemed inappropriate in terms of a prima facie rebut to the Office Action. It is observed that should there be some flaw in the Office Action such as to failing to establish the initial burden (to exhibit how each feature has been met), it also incumbent to the Applicant in return to point out such Office Action's deficiency in terms of showing very specific cited parts of Dole(that is each of them if possible) which are deemed improper; and correspondingly explain their weakness or deficiencies with regard to the corresponding claimed feature. The rebut of the Applicant amounts to: (i) repeat the claimed subject matter,(ii) reciting a portion in Dole discussing on evolving of markup language and HTML with no explanation whatsoever about the construct or language of the Rejection commensurate to a clear deficiency in addressing a particular feature, then (iii) asking where in Dole each of the parts of the claimed features are shown. The addressing of the 'converting … logic controller' limitation has been set forth in 2 parts, the first part is the markup language part mapped with Dole, the second in the automation program in industry of PLC, fulfilled with the combination Dole/Hoskins. And to rebut this, the applicant has insufficiently attacked each such part of the rejection. For instance, until specifics on each of the Dole's cited parts are identified as faulty, it is deemed that a possible rebut (against Applicant's argument if any) cannot reasonably be effectuated for the lack of specific substance as observed

above. For example, Applicants appears to not observe the burden of providing what is expected of a proper *prima facie* type of rebut against the rejection, and this includes Applicant's omission in pointing out how Hoskins' teachings as combined with Dole would render the rationale of obviousness improper. Thus, the arguments for lacking *prima facie* specificity are insufficient to overcome the rejection.

Further, it can be inferred from Applicant that Hoskins teaches that HTML has proven to be inadequate; and in light of cited references propounding on the differences between Java and Markup language, Hoskins teaches away from using a markup language. Following is a portion duplicated from the previous Office Action.

The rejection has been construed in accordance with the teachings by Hoskins in the context that Markup language is still the main language to transport other code applications or executable like Java or ActiveX. It is correct that while Active X (or Java) might not be markup language per se, ActiveX when combined with browser pages would still be helpful in enabling Hoskins or many analogous application framework environments to perform the purported endeavors or distributed methods that, as exploited in Hoskins' approach, are founded on combining markup technologies and the latest enhancements provided via OLE, Java programs, or ActiveX. The motivation as to use browser language platform to transport specifications or code snippets --as embedded/tagged objects --so to achieve distributed design or development of hardware circuitry has been set forth in the rejection. For one skill in the art, it would be incorrect to perceive that Hoskins for taking advantage of additional embedded ActiveX objects (written in a non-Markup language) to enhance the incorporating of needed data within browser pages for a specific purpose would teach away from the use of markup language; especially when browser or markup technology was well-known (at the time the invention was made and thus exemplified by Hoskins) and designed to embed not only text, program snippets – Javacript, CGI -- or video content, programmatic container pointing to other structure, markup content or code executable. Therefore, the argument denouncing the 'teach away' by Hoskins's use of Java/ActiveX for embedding objects within browser pages would be un-justified or un-convincing. The fact that Hoskins mentions about some inadequacy of markup language does not translate directly to the point where Hoskins would embed data in form of container other than browser pages, i.e. there is no teaching in Hoskins that dictates that the use ActiveX and Java automatically signifies that the use markup technology would be discarded. Besides, the rejection is purported to bring the ladder logic limitation (claim 9) or the implementation of logic controller in form of IC (claim 1) into the teachings so to render it obvious; and for this the Applicant fail to provide reasons as to why the combination as set forth in the rejection would be improper.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

(E) As for claims 2-18, Applicant has submitted (Appl. Rmrks, pg. 26-37) the same pattern of required steps, i.e. select the references, select the teachings; combine …that would produce the claimed invention; all of which deemed not commensurate (or in direct relevance) with any of the Dole's cited parts to address the claims. Again, there is no specific material by the Office Action being pointed to here in order for the Examiner to commensurately provide a counter argument based thereupon. A claim comprises features and for each, the Examiner deems that an initial burden of setting forth a prima facie case of rejection has been established and it is Applicant's burden now to point out (and doing so, very precisely in sufficient detail) which part of such Action has lacked a proper teaching that would meeting a very specific claimed feature. The above uncorrelated remarks by Applicants are not proper arguments to legitimately negate the grounds of rejection; and are deemed not somewhat misplaced in order to overcome the rejections of the above claims.

(F) Applicant has submitted that the rationale of obviousness against the claimed feature being addressed in claim 19 is largely unparseable (Appl. Rmrks, pg. 39, top). The rejection has pointed out what is not disclosed, what in Dole suggests one skill in the art an problem desired to be solved or desirable, an analogous method which teaches it, and a motivation to combine one to the other using a evidence as to why this combination would benefit the problem targeted to be solved. If there is deemed that lack of clarity in the language of the rejection effected by the Office Action, Applicant should make an effort to point out the weakness of such language; instead, Applicant contends with the same pattern: (i) recite the whole claim, (ii) paste the Office Action, (iii) ask questions about how one skill in the art would select the teaching or combine them to produce the invention, as has been observed in the inquiry pattern in section E above.

This is not prima facie rebut against the Office Action, hence would be redirected to the remarks in section E.

(G) As for claims 20-35, Applicant has submitted (Appl. Rmrks, pg. 39-49) the same pattern of required steps, i.e. select the references, select the teachings; combine …that would produce the claimed invention; all of which not commensurate with any of the Dole's cited parts to address the claims. These remarks would be referred back to section E.

(H) As per claim 36, Applicant's remarks fall into the pattern being utilized to attempt to rebut claim 19 rejection (Appl. Rmrks, pg. 50); hence would not be deemed specific to the grounds of rejection, in order to sufficiently enable the Examiner to provide specific reply.

(I) As per claims 37-38, 40, 42-43, 45-50, 52 (Appl. Rmrks, pg. 50-51, 55, 61, 62, 63-67, 69) the Applicant's pattern of inquiries will be referred to section E for appropriate reply.

(J) Applicant has submitted that for claim 39, Dole's cited portions do not show the claimed features; and that Hoskins' portions do not overcome such deficiencies by Dole (Appl. Rmrks, pg. 52-54). The subject matter of markup language conversion and the obviousness rationale to render the automation program using Hoskins has been set forth separately in claim 39; that is, Dole provides HTML pages to emcompass the methodologies and use CGI script to support these, and teaches XML being more desirable in expressing the methodologies representation (e.g. HTML, CGI - col. 7, lines 26-42; Fig 10; *more desirable to use XML* -col. 16, lines 10-47; Fig. 13). The Applicant's remarks appear to be off the marks and are deemed insufficient to reverse the rejection. Further, the argument against the obvious rationale falls under the ambit of the pattern observed in section F above; thus largely insufficient to establish appropriate grounds for Examiner to rebut.

(K) As per claim 41, Applicant disagrees using 'pushing a schema' as cited by the Office Action to analogize to the claimed *schema* (Appl. Rmrks, pg. 59). It is clear that a DTD is one representation which set forth the hierarchy of construct requirements needed to generate the content implementing an extensible markup language. The DTD as cited reads on this schema in light of the XML representation by Dole (refer to section J); and in light of HTML based communications, exchanging markup document accompanied of a form of DTD(a XML corresponding schema) would be integral to the use of XML form of message (Dole: Fig. 5) or file transmission. The arguments are largely off the mark in exposing why a DTD cannot read on a schema. The rationale used to rebut the obviousness rationale (Appl. Rmrks, pg. 60) is as deficient as earlier observed in section F.

(L) As for claims 44 and 51, the similar arguments (Appl. Rmrks, pg 63, 68) are referred back to section F for the same reasons, that is, Applicant fails to point out specific parts cited in Dole to expose their impropriety in sufficient and convincing manner.

Because Applicant's arguments are not persuasive, the rejections will stand as set forth.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence – please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VAT
October 9, 2006

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